

# **Organic Rankine Cycle Market Size, Share & Trends Analysis Report By Application (Waste Heat Recovery, Biomass, Geothermal, Solar Thermal, Oil & Gas, Waste To Energy), By Region, And Segment Forecasts, 2022 - 2030**

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## **Abstracts**

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### **Organic Rankine Cycle Market Growth & Trends**

The global organic rankine cycle market size is expected to reach USD 1.07 billion by 2030, growing at 3.3% CAGR from 2022 to 2030, according to a new report by Grand View Research, Inc. Rise in adoption of renewable energy in countries such as the U.S., China, Germany, and Canada continue to make way for progressive legislations and provide financial incentives for the deployment of renewable energy. Financial incentives such as feed-in-tariffs, subsidies, and tax benefits are some of the major tools utilized by countries around the world to attract investment in the renewable energy sector. These factors are likely to propel the market's growth in the near future.

The supply chains of spare parts for organic rankine cycle (ORC) systems are significantly affected due to the shutdown of production facilities. The manufacturing of most components in the energy & power sector has slowed down considerably. In addition, local and international travel restrictions, quarantine requirements, and lockdowns have caused delays in shipments of already manufactured parts to be supplied to the distributors and end-users. ORC manufacturers usually have access to an adequate supply of critical parts, devices, components, and materials for emergencies. But these firms are faced with increasing bottlenecks due to the limited production of supplies in countries, severely affected by COVID-19.

The geothermal segment led the market and accounted for the largest revenue share in 2021. The major reason for the dominance of the geothermal segment is due to the large megawatt capacity of these geothermal projects as compared to other application segments. The other segment includes biomass, waste heat recovery, and solar thermal. Each geothermal project holds a capacity of more than 10 MW. On the other hand, ORC-based projects in other application segment hold a capacity of 1 to 2 MW on average.

The global ORC market is a concentrated market wherein major companies such as Ormat, Turboden, and Exergy accounted for more than 75% market share in 2020. These companies apart from equipment supply are also focused on providing EPC and long-term maintenance services to increase their market share. This factor is expected to make these companies hold their dominance in the ORC market during the forecast period.

### Organic Rankine Cycle Market Report Highlights

Geothermal held the largest market share of 61.71% in the application segment in 2021. Geothermal projects are usually of higher capacity. Due to this, the ORC market exhibited higher growth potential for geothermal application in 2021

As of 2021, Europe accounted for 30.40% of revenue share. The region has been one of the front runners in implementing favorable policies and support mechanisms for the growth of renewable energy and energy efficiency projects across the globe

Various strategic initiatives were implemented over the past few years to boost the growth of the market. For instance, in February 2020, Turboden signed a contract to provide an 8000 kW ORC system for power generation which uses sawmill residual woody biomass as fuel to Meadow Lake Tribal Council (MLTC), Canada

## Contents

### **CHAPTER 1 METHODOLOGY & SCOPE**

- 1.1 Organic Rankine Cycle Market Segmentation
- 1.2 Assumptions
- 1.3 Information Procurement
  - 1.3.1 Purchased Database
  - 1.3.2 GVR's Internal Database
  - 1.3.3 Secondary Sources
  - 1.3.4 Third Party Perspective
  - 1.3.5 Primary Research
- 1.4 Information Analysis
  - 1.4.1 Data Analysis Models
- 1.5 Market Formulation and Data Visualization
- 1.6 Data Validation and Publishing

### **CHAPTER 2 EXECUTIVE SUMMARY**

- 2.1 Market Outlook
- 2.2 Market Snapshot

### **CHAPTER 3 MARKET VARIABLES, TRENDS, AND SCOPE**

- 3.1 Penetration & Growth Prospect Mapping
- 3.2 Industry Value Chain Analysis
- 3.3 Raw material trends
  - 3.3.1 Major Raw material Analysis
    - 3.3.1.1 Steel
    - 3.3.1.2 Organic Fluid
  - 3.3.2 Manufacturing Trends
  - 3.3.3 Sales Channel Analysis
- 3.4 Technology Overview
  - 3.4.1 Turbines
  - 3.4.2 Heat Exchangers
  - 3.4.3 Condensers
  - 3.4.4 Feed Pumps
- 3.5 Regulatory Framework
  - 3.5.1 Policies and Regulations by Countries

- 3.5.2 Standard & Compliances
- 3.5.3 Safety
- 3.6 Market Dynamics
  - 3.6.1 Market Driver Analysis
    - 3.6.1.1 Rise in adoption of renewable energy
    - 3.6.1.2 Long lifecycle coupled with low O&M costs
  - 3.6.2 Market Restraint Analysis
    - 3.6.2.1 Presence of substitutes
  - 3.6.3 Opportunity Assessment
  - 3.6.4 Industry Challenges
- 3.7 Business Environment Analysis: ORC Market
  - 3.7.1 Industry Analysis - Porter's
  - 3.7.2 PESTEL analysis
- 3.8 Projects Brief
  - 3.8.1 Case study-1
    - 3.8.1.1 Customer brief:
    - 3.8.1.2 Need:
    - 3.8.1.3 Solution:
  - 3.8.2 Case study-2
    - 3.8.2.1 Customer brief:
    - 3.8.2.2 Need:
    - 3.8.2.3 Solution:
  - 3.8.3 Case study-3
    - 3.8.3.1 Customer brief:
    - 3.8.3.2 Need:
    - 3.8.3.3 Solution:
  - 3.8.4 Case study-4
    - 3.8.4.1 Customer brief:
    - 3.8.4.2 Need:
    - 3.8.4.3 Solution:
  - 3.8.5 Case study-5
    - 3.8.5.1 Customer brief:
    - 3.8.5.2 Need:
    - 3.8.5.3 Solution:
- 3.9 Impact of Corona Virus on ORC Market
  - 3.9.1 Challenges
  - 3.9.2 Impact Verdict - Medium

## **CHAPTER 4 ORGANIC RANKINE CYCLE MARKET: APPLICATION ESTIMATES &**

## TREND ANALYSIS

4.1 Global Organic Rankine Cycle Market: Application Movement Analysis, 2021 & 2030

4.2 Waste Heat Recovery

4.2.1 Global orc market estimates and forecasts in waste heat recovery, 2019 - 2030 (USD Million) (MW)

4.2.2 Petroleum Refinery

4.2.2.1 Global ORC market estimates and forecasts in waste heat recovery, by petroleum refinery, 2019 - 2030 (USD Million) (MW)

4.2.3 Cement

4.2.3.1 Global ORC market estimates and forecasts in waste heat recovery, by cement, 2019 - 2030 (USD Million) (MW)

4.2.4 Chemical

4.2.4.1 Global ORC market estimates and forecasts in waste heat recovery, by chemical, 2019 - 2030 (USD Million) (MW)

4.2.5 Metal Production and Casting

4.2.5.1 Global ORC market estimates and forecasts in waste heat recovery, by METAL PRODUCTION AND CASTING, 2019 - 2030 (USD Million) (MW)

4.2.6 Glass

4.2.6.1 Global ORC market estimates and forecasts in waste heat recovery, by Glass, 2019 - 2030 (USD Million) (MW)

4.3 Waste to Energy

4.3.1 Global ORC market estimates and forecasts in waste to energy applications, 2019 - 2030 (USD Million) (MW)

4.4 Oil & Gas

4.4.1 Global ORC market estimates and forecasts in oil and gas applications, 2019 - 2030 (USD Million) (MW)

4.5 Biomass

4.5.1 Global ORC market estimates and forecasts in biomass, 2019 - 2030 (MW) (USD Million)

4.6 Geothermal

4.6.1 Global ORC market estimates and forecasts in geothermal applications, 2019 - 2030 (USD Million) (MW)

4.7 Solar Thermal

4.7.1 Global ORC market estimates and forecasts in solar thermal applications, 2019 - 2030 (USD Million) (MW)

## CHAPTER 5 GLOBAL ORGANIC RANKINE CYCLE MARKET: REGIONAL

## ESTIMATES & TREND ANALYSIS

### 5.1 Global Organic Rankine Cycle Market: Regional Movement Analysis, 2021& 2030

#### 5.2 North America

5.2.1 North America ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million) (MW)

##### 5.2.2 U.S.

5.2.2.1 U.S. ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million) (MW)

##### 5.2.3 Canada

5.2.3.1 Canada ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million)

#### 5.3 Europe

5.3.1 Europe ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million) (MW)

##### 5.3.2 Germany

5.3.2.1 Germany ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million) (MW)

##### 5.3.3 Turkey

5.3.3.1 Turkey ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million) (MW)

##### 5.3.4 Italy

5.3.4.1 Italy ORC market estimates and forecasts, by application 2019 - 2030 (USD Million) (MW)

#### 5.4 Asia Pacific

5.4.1 Asia Pacific ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million)

##### 5.4.2 China

5.4.2.1 China ORC market estimates and forecasts, by application 2019 - 2030 (USD Million) (MW)

##### 5.4.3 Japan

5.4.3.1 Japan ORC market estimates and forecasts, by application 2019 - 2030 (USD Million) (MW)

##### 5.4.4 Thailand

5.4.4.1 Thailand ORC market estimates and forecasts, by application 2019 - 2030 (USD Million) (MW)

#### 5.5 Central & South America

5.5.1 Central & South America ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million) (MW)

## 5.6 Middle East & Africa

5.6.1 Middle East & Africa ORC market estimates and forecasts, by application, 2019 - 2030 (USD Million) (MW)

## **CHAPTER 6 COMPETITIVE LANDSCAPE**

### 6.1 Key Global Players, Recent Market Developments & Their Impact on the Industry

6.1.1 Vendor Landscape

6.1.2 List of Key Distributors and Channel Partners

6.1.3 Company Market Position Analysis

## **CHAPTER 7 COMPANY PROFILES**

### 7.1 Turboden S.p.A.

7.1.1 Company Overview

7.1.2 Product Benchmarking

7.1.3 Strategic Initiatives

### 7.2 Exergy International S.r.l

7.2.1 Company Overview

7.2.2 Product Benchmarking

7.2.3 Strategic Initiatives

### 7.3 Zhejiang Kaishan Compressor Co., Ltd.

7.3.1 Company Overview

7.3.2 Product Benchmarking

7.3.3 Strategic Initiatives

### 7.4 Enogia

7.4.1 Company Overview

7.4.2 Product Benchmarking

7.4.3 Strategic Initiatives

### 7.5 Triogen

7.5.1 Company Overview

7.5.2 Product Benchmarking

7.5.3 Strategic Initiatives

### 7.6 Calnetix Technologies, LLC

7.6.1 Company Overview

7.6.2 Product Benchmarking

7.6.3 Strategic Initiatives

### 7.7 ABB

7.7.1 Company Overview

- 7.7.2 Product Benchmarking
- 7.7.3 Financial Performance
- 7.8 Atlas Copco AB
  - 7.8.1 Company overview
  - 7.8.2 Financial Performance
  - 7.8.3 Product Benchmarking
- 7.9 TAS Energy Inc.
  - 7.9.1 Company Overview
  - 7.9.2 Product Benchmarking
  - 7.9.3 Strategic Initiatives
- 7.10 Elvosolar, a.s.
  - 7.10.1 Company Overview
  - 7.10.2 Product Benchmarking
- 7.11 General Electric
  - 7.11.1 Company Overview
  - 7.11.2 Product Benchmarking
  - 7.11.3 Financial Performance
  - 7.11.4 Strategic Initiatives
- 7.12 INTEC GMK
  - 7.12.1 Company Overview
  - 7.12.2 Product Benchmarking
- 7.13 SUMEC GEOPOWER AG
  - 7.13.1 Company Overview
  - 7.13.2 Service Benchmarking
  - 7.13.3 Strategic Initiatives
- 7.14 ORCAN ENERGY AG
  - 7.14.1 Company overview
    - 7.14.1.1 Product Benchmarking
  - 7.14.2 Strategic Initiatives



## List Of Tables

### LIST OF TABLES

Table 1 List of major steel-producing countries 2018 and 2019 (MT)

Table 2 Basic properties of organic (working) fluids

Table 3 List of Simulating Tools

Table 4 Key Policies and Regulations by Countries

Table 5 Standards and compliances for ORC

Table 6 India 175 GW Mission, Capacity Breakup

Table 7 Global ORC market estimates and forecasts in waste heat recovery, 2019 - 2030 (USD Million)

Table 8 Global ORC market estimates and forecasts in waste heat recovery, 2019 - 2030 (MW)

Table 9 Global ORC market estimates and forecasts in waste heat recovery, by petroleum refinery, 2019 - 2030 (USD Million)

Table 10 Global ORC market estimates and forecasts in waste heat recovery, by petroleum refinery, 2019 - 2030 (MW)

Table 11 Global ORC market estimates and forecasts in waste heat recovery, by cement, 2019 - 2030 (USD Million)

Table 12 Global ORC market estimates and forecasts in waste heat recovery, by cement, 2019 - 2030 (MW)

Table 13 Global ORC market estimates and forecasts in waste heat recovery, by chemical, 2019 - 2030 (USD Million)

Table 14 Global ORC market estimates and forecasts in waste heat recovery, by chemical, 2019 - 2030 (MW)

Table 15 Global ORC market estimates and forecasts in waste heat recovery, by metal production and casting, 2019 - 2030 (USD Million)

Table 16 Global ORC market estimates and forecasts in waste heat recovery, by metal production and casting, 2019 - 2030 (MW)

Table 17 Global ORC market estimates and forecasts in waste heat recovery, by glass, 2019 - 2030 (USD Million)

Table 18 Global ORC market estimates and forecasts in waste heat recovery, by glass, 2019 - 2030 (MW)

Table 19 Global ORC market estimates and forecasts in waste to energy, 2019 - 2030 (USD Million)

Table 20 Global ORC market estimates and forecasts in waste to energy, 2019 - 2030 (MW)

Table 21 Global ORC market estimates and forecasts in oil & gas, 2019 - 2030 (USD

Million)

Table 22 Global ORC market estimates and forecasts in oil & gas, 2019 - 2030 (MW)

Table 23 Global ORC market estimates and forecasts in biomass, 2019 - 2030 (USD Million)

Table 24 Global ORC market estimates and forecasts in biomass, 2019 - 2030 (MW)

Table 25 Global ORC market estimates and forecasts in geothermal applications, 2019 - 2030 (USD Million)

Table 26 Global ORC market estimates and forecasts in geothermal applications, 2019 - 2030 (MW)

Table 27 Global ORC market estimates and forecasts in solar thermal applications, 2019 - 2030 (USD Million)

Table 28 Global ORC market estimates and forecasts in solar thermal applications, 2019 - 2030 (MW)

Table 29 North America ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 30 North America ORC market capacity, by application, 2019 - 2030 (MW)

Table 31 U.S. ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 32 U.S. ORC market capacity, by application, 2019 - 2030 (MW)

Table 33 Canada ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 34 Canada ORC market capacity, by application, 2019 - 2030 (MW)

Table 35 Europe ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 36 Europe ORC market capacity, by application, 2019 - 2030 (MW)

Table 37 Germany ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 38 Germany ORC market capacity, by application, 2019 - 2030 (MW)

Table 39 Turkey ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 40 Turkey ORC market capacity, by application, 2019 - 2030 (MW)

Table 41 Italy ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 42 Italy ORC market capacity, by application, 2019 - 2030 (MW)

Table 43 Asia Pacific ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 44 Asia Pacific ORC market capacity, by application, 2019 - 2030 (MW)

Table 45 China ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 46 China ORC market capacity, by application, 2019 - 2030 (MW)

Table 47 Japan ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 48 Japan ORC market capacity, by application, 2019-2030 (MW)

Table 49 Thailand ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 50 Thailand ORC market revenue, by application, 2019 - 2030 (MW)

Table 51 Central & South America ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 52 Central and South America ORC market capacity, by application, 2019 - 2030

(MW)

Table 53 ORC Projects developed by Ormat in Kenya

Table 54 Middle East & Africa ORC market revenue, by application, 2019 - 2030 (USD Million)

Table 55 Middle East & Africa ORC market capacity, by application, 2019 - 2030 (MW)

Table 56 List of Key Distributors and Channel Partners

## List Of Figures

### LIST OF FIGURES

- Fig. 1 ORC market segmentation
- Fig. 2 Information Procurement
- Fig. 3 Primary research pattern
- Fig. 4 Primary Research Process
- Fig. 5 Market research approaches - Bottom-Up Approach
- Fig. 6 Market research approaches - Top-Down Approach
- Fig. 7 Market research approaches - Combined Approach
- Fig. 8 Organic Rankine Cycle (ORC) Market snapshot, 2021 (USD Million)
- Fig. 9 ORC market - Penetration & growth prospect mapping
- Fig. 10 ORC market - Industry value chain analysis
- Fig. 11 Market driver impact analysis
- Fig. 12 Market restraint impact analysis
- Fig. 13 ORC market analysis - Porter's
- Fig. 14 ORC market analysis - PESTEL analysis
- Fig. 15 Global Organic Rankine Cycle Market: Application Movement Analysis, 2021 & 2030 (USD Million)
- Fig. 16 Global Organic Rankine Cycle Market: Regional Movement Analysis, 2021 & 2030
- Fig. 17 Four quadrant positioning of vendors

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